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**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC *Plaintiff*, v. SAMSUNG ELECTRONICS CO., LTD and SAMSUNG ELECTRONICS AMERICA, INC., *Defendants*.	Case No. 2:23-CV-00103-RSP **JURY TRIAL DEMANDED**

**DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF INVALIDITY AND
MOTION FOR PARTIAL SUMMARY JUDGMENT OF NON-INFRINGEMENT
<u>OF THE '733 PATENT</u>**

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TABLE OF ABBREVIATIONS

Abbreviation	Term
Defendants or Samsung	Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.
Plaintiff or Headwater	Headwater Research LLC
'733 patent	U.S. Patent No. 8,406,733

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TABLE OF EXHIBITS

Exhibit	Description
1	Excerpts of the Opening Expert Report of Erik de la Iglesia (September 26, 2024)
2	SAM-HW-2_00363438, Where's my Gphone (November 5, 2007)
3	Excerpts of SAM-HW-2_00215337
4	SAM-HW-2_00364888, T-Mobile Unveils the T-Mobile G1 - the First Phone Powered by Android
5	Excerpts of GOOG-HEADWATER-00001811, A Brief History of Buzz
6	SAM-HW-2_00364486, This is the Droid you're looking for (November 12, 2007)
7	SAM-HW-2_00364438, SDK Archives
8	SAM-HW-2_00364485, Android SDK update: m5-rc15 released
9	SAM-HW-2_00364429, Release Notes For Older SDK Versions
10	GOOG-HEADWATER-00001767, A Brief History of FCM
11	Excerpts of the Opening Expert Report of Ian Foster, Ph.D. (September 26, 2024)
12	Excerpts of the Deposition Transcript of Mr. Todd Hansen (September 10, 2024)
13	Excerpts of SAM-HW-2_00362686, Ron Amadeo, *A decade and a half of instability: The history of Google messaging apps*, Ars Technica
14	Excerpts of SAMSUNG_PRIORART2_0007087, Debajit Ghosh, Building Push Applications for Android (May 20, 2010)
15	Excerpts of the Rebuttal Expert Report of Erik de la Iglesia (October 14, 2024)
16	Excerpts of SAM-HW-2_00365173, RFC 3921, Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence (October 2004)
17	Excerpts of Headwater's September 6, 2024 Response to Samsung's First Set of Interrogatories (Nos. 1-14)
18	GOOG-HW103-SC00435, ████████████
19	GOOG-HW103-SC00499, ████████████
20	Excerpts of GOOG-HW103-SC00298, ████████████
21	SAM-HW-2_00365210, ████████████
22	Excerpts of SAMSUNG_PRIORART2_0007122
23	GOOG-HW103-SC00247, ████████
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25	GOOG-HW103-SC00203, ████████
26	GOOG-HW103-SC00213, ██████████
27	GOOG-HW103-SC00220, ████████████
28	GOOG-HW103-SC00386, ████████████
29	Excerpts of SAM-HW-2_00365211
30	GOOG-HEADWATER-00001771
31	Excerpts of SAM-HW-2_00366841
32	Excerpts of GOOG-HW103-SC00059, ████████

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I.   INTRODUCTION

Headwater accuses Samsung products running certain Google services of infringing the '733 patent. But the predecessor service to the accused Google services—called GTalkService— was deployed *before* Headwater's asserted priority date, and GTalkService worked in fundamentally the same way. For the independent claims, Headwater's expert tries to distinguish GTalkService on a single point, claiming that GTalkService does not disclose the claimed "agent identifier." Headwater's claim that only the accused services used "agent identifiers" within messages to determine which apps would receive the messages' content is both illogical (how else could a mobile device route incoming messages to the right app?) and contradicted by the record, which shows that the "intent" and "manifest" infrastructure Headwater accuses of infringement actually predated Headwater's purported invention. Because GTalkService contains the "agent identifier" element that Headwater claims is missing and because all of the additional limitations in the dependent claims were likewise used in GTalkService, Samsung's motion for invalidity of the '733 patent should be granted.

Samsung's motion for summary judgment of non-infringement should also be granted because Headwater's infringement theory based on a "registration token" is unsupported by any evidence that such tokens exist in the accused messages received by the user device.

II.   STATEMENT OF ISSUES TO BE DECIDED BY THE COURT

1.   Whether GTalkService invalidates claims 1, 3, 7-9, 13, 19, 23, and 30 of the '733 patent.

2.   Whether C2DM invalidates claims 1 and 30 of the '733 patent.

3.   Whether Samsung infringes claims 1, 3, 7-9, 13, 19, 23, and 30 of the '733 patent under Headwater's theory that relies on the registration token as the claimed "agent identifier."

III.   STATEMENT OF UNDISPUTED MATERIAL FACTS

1.   Samsung contends that GTalkService, a service Google developed for Android mobile

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devices, is prior art to the '733 patent under §§ 102(a), (b), and (g)(2). Ex. 11, ¶ 95. GTalkService

was renamed C2DM, which was renamed GCM, which was then renamed FCM. Ex. 10; Ex. 12

at 27:11-15, 34:17-35:6, 37:4-12; Ex. 13 at 694. Headwater accuses C2DM, GCM, and FCM of

infringing the '733 patent. Ex. 1 at §§ II.E, V.J.

2.   On November 5, 2007, Google publicly unveiled Android, a "comprehensive platform for

mobile devices" that "includes an operating system, user-interface and applications—all of the

software to run a mobile phone." Ex. 2 at 438.

3.   GTalkService enabled messages to be "pushed" from Google servers to specific apps in

mobile phones. It was publicly reported that "GTalkService ran communication for Android's

entire push notification system." Ex. 13 at 694.

4.   No later than March 2008, Google was using GTalkService, publicly announced

GTalkService, and gave people outside of Google the software and documentation to use

GTalkService for their own apps on upcoming Android phones. Exs. 2, 6, 8; Ex. 12 at 18:14-

19:22, 20:19-21:21, 22:15-23:3. On March 3, 2008, Google released Software Developer Kit

("SDK") version m5-rc15 that included code for GTalkService and taught developers to use

GTalkService for their own apps. Ex. 7 at 440; Ex. 8; Ex. 9 at 432. This SDK came with an

emulator that ran on Windows computers. Ex. 9. A May 2008 Android developers webpage

taught app developers how to use the GTalkService programming interface and stated that Google

was using GTalkService for its instant messaging app. Ex. 3 at 464. Google also used

GTalkService with Gmail, Contacts, and Calendar apps in 2008. Ex. 10 at 768.

5.   GTalkService used identifiers contained in messages received from the server to help the

mobile device figure out what app should receive the messages. Ex. 3 at 359; Ex. 28 at lines 18–

19. GTalkService used these identifiers to create "intents" that contained identifiers that identified

the intended app to receive the message's contents. *See* Ex. 3 at 464; Ex. 23; Exs. 25–27.

6.   On August 18, 2008, after several months of inclusion in SDKs, emulators, and developer documentation, Google announced that Google would continue to use GTalkService for its own apps, but temporarily discontinue GTalkService for non-Google apps "while we improve the service." Ex. 9 at 431; *see also* Ex. 10 at 768; Ex. 12 at 26:4-18.

7.   In September 2008, Google apps used GTalkService on the first Android 1.0 mobile phone released in the United States, the T-Mobile G1. Ex. 12 at 87:10-24; Ex. 4; Ex. 5 at 812.

8.   Headwater's asserted priority date of the '733 patent is January 28, 2009. Ex. 17 at 8.

9.   In May 2010, GTalkService was reintroduced for non-Google apps and renamed C2DM. Ex. 14 at 96. The core features of GTalkService continued in C2DM, GCM, and FCM, which Headwater contends infringe. Ex. 1 at §§ II.E, V.J.

IV.   LEGAL STANDARD

Summary judgment is proper when "there is no genuine dispute as to any material fact." Fed. R. Civ. P. 56(a). An issue of material fact is genuine if the evidence could lead a reasonable jury to find for the non-moving party. *ThinkOptics, Inc. v. Nintendo of Am., Inc.*, 2014 WL 3347531, *1 (E.D. Tex. July 3, 2014). Mere conclusory allegations, unsubstantiated assertions, improbable inferences, and unsupported speculation are not competent summary judgment evidence. *Id.*; *see Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 1001 (Fed. Cir. 2008); *T-Rex Prop. AB v. Regal Ent. Grp.*, 2019 WL 4727426, *5 (E.D. Tex. Sept. 27, 2019).

Section 102(a) provides that a person is not entitled to a patent if "the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent." 35 U.S.C. § 102(a).

Section 102(b) provides that a person is not entitled to a patent if "the invention was patented or described in a printed publication in this or a foreign country or in public use or on

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sale in this country, more than one year prior to the date of the application for patent in the United

State." 35 U.S.C. § 102(b).

Under § 102(g)(2), "[a] person shall be entitled to a patent unless ... before such person's

invention thereof, the invention was made in this country by another inventor who had not

abandoned, suppressed, or concealed it." 35 U.S.C. § 102(g)(2). Prior invention requires the non-

patentee "(1) reduced its invention to practice first ... or (2) was the first party to conceive of the

invention and then exercised reasonable diligence in reducing that invention to practice." *Teva*

Pharm. Indus. Ltd. v. AstraZeneca Pharms. LP, 661 F.3d 1378, 1383 (Fed. Cir. 2011). "Once the

invention has been shown to work for its intended purpose, reduction to practice is complete."

Loral Fairchild Corp. v. Matsushita Elec., 266 F.3d 1358, 1362–63 (Fed. Cir. 2001). "Conception

is the formation, in the mind of the inventor of a definite and permanent idea of the complete and

operative invention, as it is thereafter to be applied in practice." *REG Synthetic Fuels, LLC v.*

Neste Oil Oyj, 841 F.3d 954, 962 (Fed. Cir. 2016). Conception requires corroboration. *Id.*

V.   GTALKSERVICE INVALIDATES THE ASSERTED CLAIMS.

A.   GTalkService, Which Was Released No Later Than 2008, Is Prior Art.

There is no genuine dispute that GTalkService was released by March 2008 and

continuously used from then on, including in the T-Mobile G1 phone as of September 2008.

Headwater's expert, Mr. de la Iglesia, complains that Samsung's expert cites documents created

after the priority date. Ex. 15, ¶ 71. But he does not identify any markers of unreliability in the

documents or dispute that they, or the testimony of Google's corporate representative, are accurate

about the state of play for GTalkService from 2007 onward. And the evidence identified in this

motion that *pre*dates the priority date, such as code and public Android documents, *see, e.g.,* Ex.

2 at 438, Ex. 3 at 464, Ex. 12, Ex. 8, Ex. 24, establishes that GTalkService is prior art.

Mr. de la Iglesia points out that access to GTalkService for non-Google apps was

temporarily removed in September 2008. Ex. 15, ¶ 73. But the same evidence he relies on shows that Google continued to use GTalkService for its own apps. Ex. 9 at 431. Google's continued use of GTalkService is confirmed by Google's corporate representative (Ex. 12 at 87:10-24; 26:4-18) and uncontested documents (Ex. 10 at 768). Even if GTalkService had been removed for *all* apps, it would *still* be prior art because a "public use under section 102(b) cannot be undone by subsequent actions." *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1334 (Fed. Cir. 2005).

B.   GTalkService Anticipates Independent Claims 1 and 30.

GTalkService anticipate claims 1 and 30 under 35 U.S.C. §§ 102(a), (b), and (g)(2) because Google conceived of GTalkService, disclosed it to the public, and reduced it to practice no later than 2008. Google did not abandon, suppress, nor conceal GTalkService. As explained in Sections III above, Google provided SDKs, emulators, developer documentation, and APIs for GTalkService that enabled those skilled in the art to make their own apps using GTalkService.

1.   Independent Claims 1 and 30: Headwater Does Not Even Dispute That GTalkService Includes The Vast Majority Of The Limitations

There is no dispute whatsoever that the vast majority of limitations in claims 1 and 30 were included in GTalkService. That is for good reason. These limitations are all met by GTalkService under Headwater's own infringement theory for C2DM, GCM, and FCM, and "a patent may not, like a nose of wax, be twisted one way to avoid anticipation and another to find infringement." *CommScope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1299 (Fed. Cir. 2021).

Under Headwater's allegations for C2DM, GCM, and FCM, GTalkService also enabled an "end-user device" with "a modem for enabling communication with a network system" (like the T-Mobile G1) to communicate with Google servers over a "service control link." Just as in C2DM, GCM, and FCM, GTalkService's "service control link" is a Transmission Control Protocol ("TCP") connection that is "secured by an encryption protocol," namely the SSL (also referred to as TLS)

encryption protocol. Exs. 18–21. Push messages sent over this link in both GTalkService and the accused products are called "stanzas." Ex. 16 at 173. And like the accused products, GTalkService uses Android's "intent" infrastructure (the accused "agent communication bus") to route these messages to the intended app. Ex. 3 at 358. In GTalkService, messages that are received from a Google server (the "service control server link element" / "network element" under Headwater's theory) and routed to apps such as ApiDemos, Talk, Gmail, Contacts, and Calendar, each of which includes a claimed "device agent" under Headwater's theory. Exs. 25–27; Ex. 10 at 767. These Google servers also communicate with other servers (the "plurality of servers") from which the message content is received. Ex. 18–19.

According to Headwater, a system that encrypts a TCP link with an SSL encryption protocol infringes the stored and shared "encryption key" limitation and the encrypted and decrypted "agent messages" limitations. Ex. 1, ¶¶ 707–716, 772–776. And GTalkService uses SSL. Exs. 18–21. GTalkService discloses that the "decrypted agent message" comprises "message content for delivery to a particular device agent of the plurality of device agents," and this content could come "from a particular server of a plurality of servers communicatively coupled to the service control server link element." *See* Ex. 23.

GTalkService delivers the claimed "message content" in an intent "to the particular device agent over the agent communication bus." ▮▮▮▮▮▮creates an intent based on the message and that intent is transmitted to the claimed "device agent" in apps. Exs. 23, 25–27; Ex. 10 at 767.

2.   Independent Claims 1 and 30: There Is No Genuine Dispute Regarding The Other Claim Limitations

Headwater's expert contests a single element, the "agent identifier," found in limitations 1[b], [e], and [f] and 30[b] and [c]. Ex. 15, Sect. IV.A.1–3, 11–12. Claims 1 and 30 require an "agent identifier" that identifies a "particular device agent" (*i.e.*, software in an app). They require
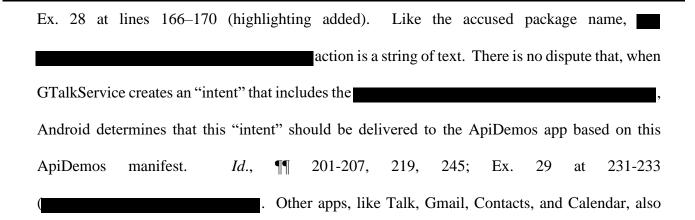
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that the "agent identifier" be included in the "decrypted agent message" and that the message

content in the "decrypted agent message" be delivered "based on the particular agent identifier."

There is no genuine dispute that GTalkService meets this limitation. The presence of

"agent identifiers" in GTalkService is illustrated by Headwater's own infringement contentions

about C2DM and other GTalkService successors. In the accused products, Headwater accuses a

"package name" of being the "agent identifier." *See* Ex. 1, ¶¶ 691, 680. In **C2DM**, the "package

name" element (a string of text) is found in an app's "manifest" file within the Android software.

See Ex. 1, ¶ 957 (citing Ex. 22 at 7123). Headwater alleges that "intents" route messages to apps

based on package name in the manifest file. *See*, *e.g.*, Ex. 1, ¶¶ 851, 865. Specifically, the system

creates an intent with the package name (a string of text) and will "***broadcast***" that message to "***the***

set of apps that match the package." *See*, *e.g.*, Ex. 1, ¶ 187 *citing* Ex. 12 at 135:16-21 (emphasis

added).

Before C2DM, messages in GTalkService included manifest files with "action" elements

(also strings of text), which served the same message-directing purpose. The names changed; the

material features did not. "Intents" and "manifest" files with names have existed, and been used

to deliver messages to particular apps, since the inception of Android. *See*, *e.g.* Ex. 3 at 357-376.

GTalkService used intents to route messages to intended apps. Android 2008 developer

documentation states that, in "GTalkService," "the sender calls a method on a Service to send a

message, and ***the receiver is notified via a broadcast Intent***…" Ex. 3 at 464 (emphasis added).

Such "intents" are created by the ███████ function on the mobile device, which parses the

incoming message to create an "intent" based on both the message's content and its other elements.

Ex. 23 (███████████████████████). A manifest file for a particular app

identifies which "intents" should be directed to that app based on the "action" elements in the

████████████

manifest. Ex. 3 at 437. In this way, "intents" deliver messages with particular elements to particular apps. *See* Ex. 25 ███████; Ex. 26 ███████); Ex. 27 ███████. In the words of claims 1 and 30, intents deliver message content to particular device agents (within apps) "based on the particular agent identifier" in the encrypted message from which the intent was created.

Headwater's conflicting contentions—that an "intent" created from a message that includes a "package name" element (as in the accused C2DM) infringes the asserted claims, while an "intent" created from a message that includes an "action" element (as in the prior art GTalkService) does not practice those same claims—cannot be reconciled. C2DM and GTalkService both broadcast intents to apps based on strings of text located in a manifest file. Headwater does not dispute that actions, manifests, and intents were used by GTalkService, nor that these actions would be included in the incoming encrypted "agent messages" sent from the server to the user device. *See*, *e.g.*, Ex. 11, ¶¶ 217, 219. For example, the 2008 SDK version m5-rc15 included a sample app, called ApiDemos, to teach people how to use GTalkService for their app. The manifest includes an "action" to route a GTalkService message to this ApiDemos app:

████████████████████████████
████████████████████████████
████████████████████████████

Ex. 28 at lines 166–170 (highlighting added). Like the accused package name, ██ ███████████████████ action is a string of text. There is no dispute that, when GTalkService creates an "intent" that includes the ████████████████████████, Android determines that this "intent" should be delivered to the ApiDemos app based on this ApiDemos manifest. *Id.*, ¶¶ 201-207, 219, 245; Ex. 29 at 231-233 (████████████████████. Other apps, like Talk, Gmail, Contacts, and Calendar, also

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used package names, manifests, and actions. Ex. 24 (███████████████████); Ex. 10 at 768.

Mr. de la Iglesia ignores all of this evidence and presents conclusory allegations that contradict the record and fail to raise a material dispute over the "agent identifier" limitation.

First, Mr. de la Iglesia states that "an 'action' can be an abstract string of text" and "any application could register to receives [sic] broadcasts that match a specified IntentFilter based on the abstract string of text of the 'action.'" *See* Ex. 15, ¶¶ 397-99, 400. This hypothetical about "abstract strings of text" is irrelevant. There is no reason why an "abstract string of text" cannot serve as the "agent identifier." "[T]the plain language of the claims does not require that the [agent] identifier be unique or be in any specific format." *Vivint, Inc. v. Alarm.com Inc*., 741 F. App'x 786, 791 (Fed. Cir. 2018). Moreover, the record demonstrates that the "actions" are identifiable to the target device agent and include "agent identifiers" like ███████████████████████████, which is all the claims require. *See* Ex. 3 at 359; Ex. 28 at lines 167-169. For example, the ApiDemos manifest the package name includes the string of text "samples":

███

Ex. 28 (███████████████████████ at lines 18–19 (highlighting added). And as seen above, the "action" that is the "agent identifier" used to route the message to ApiDemos also includes the string of text "█████████ *Id*. at lines 168.

Mr. de la Iglesia's complaint that some actions can be received by multiple apps is a belated narrowing construction to exclude "agent identifiers" that identify multiple apps. And it is again

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a hypothetical insufficient to save claims 1 and 30 from invalidity, because despite having the relevant SDK, Mr. de la Iglesia provides no evidence that the "action" that includes ████████████████████████████████ any more than one app, ApiDemos. To the contrary, ApiDemo is the only app in evidence that uses ██████████████████████ as an action name. Moreover, even if an "action" were to identify more than one app, Mr. de la Iglesia cannot argue that this prevents "actions" from being "agent identifiers" without fatally harming Headwater's infringement positions. According to Mr. de la Iglesia's report, the "package name" in the accused products is also a string of text that goes to "the *set* of apps that match the package." *See*, *e.g.*, Ex. 1, ¶ 187 *citing* Ex. 12 at 135:16-21. If Mr. Iglesia were correct, the accused products would not infringe for the same reason. And even if a hypothetical intent in GTalkService was routed to multiple apps, the fact that GTalkService used at least some unique identifiers, like the one for ApiDemos, renders GTalkService invalidating. *Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003) ("a prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.").

Next, Mr. de la Iglesia speculates that the word "████████" in the ApiDemos "action" *could* be "a device agent identifier for GTalk," not ApiDemos. Ex. 15, ¶ 400. Mr. de la Iglesia completely ignores the fact that the ███████████████████████ "action" is found in the manifest file for *ApiDemos* and even lines up with the word "samples" in the package name also found in the same manifest file. Ex. 28 at lines 167–169. Beyond "unsupported speculation [that] is not sufficient to defeat a motion for summary judgment," Mr. de la Iglesia fails to cite to any other app with this action or package name. *Lavigne v. Cajun Deep Foundations, L.L.C.*, 654 F. App'x 640, 647 (5th Cir. 2016); *see also ThinkOptics*, 2014 WL 3347531, at *1.

Finally, Mr. de la Iglesia resorts to alleging that Samsung's expert "essentially

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acknowledges that an 'action' name is not the same as an application identifier." Ex. 15, ¶ 401

This misrepresents Dr. Foster's opinion, which actually states: "***In the alternative***, to the extent

GTalkService is found not to disclose 'an associated device agent identifier,' …. It would have

been obvious to modify GTalkService such that, instead of the action, data, and category elements

of an intent, an app identifier is used to determine the app to which the message is sent." Ex. 11,

¶ 221. This alternative argument in the event that GTalkService is found not to use an "agent

identifier" is hardly a concession that GTalkService does not already have one. Mr. de la Iglesia

then alleges that "Dr. Foster acknowledges that using an 'action' was insecure and unreliable,

compared to using an application identifier." Ex. 15, ¶ 401. But paragraph 222 continues the

assumption that the action in GTalkService is found not to be an "agent identifier." *See* Ex. 11, ¶

222. Further, the claims do not disqualify "agent identifiers" based on security or reliability.

C.   GTalkService Renders Claims 1 and 30 Obvious.

To the extent the Court finds that GTalkService does not disclose an "agent identifier," *e.g*.,

the term has some specific format that GTalkService lacks, it would have been obvious to modify

GTalkService such that, instead of an action name, some other identifier like a unique integer is

used to identify an app. Doing so would have provided a predictable result of routing a message

to a single application based on the identifier. The modification would have entailed a minor

software change, utilizing the intent infrastructure already in place.

D.   GTalkService Anticipates or Renders Obvious The Dependent Claims.

GTalkService anticipates all asserted dependent claims under §§ 102(a), (b), and (g)(2), or

renders them obvious, particularly under Headwater's broad infringement theories.

Claims 3 and 7-9: GTalkService anticipates claims 3 and 7-9, which require that the

message content comprise information like "service usage," an "advertisement," "billing," or

"software update." The T-Mobile G1 received such information because it used the data

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messaging capability of GTalkService to synchronize Google apps such as Contacts, Calendar, and Gmail. Ex. 10 at 768; Ex. 9 at 431; Ex. 12 at 86:23-87:24 ("[GTalk] functionality existed when we had the G1 and we had the messaging to gmail or calendar or contacts"). For example, to synchronize the Gmail app, the G1 received information about new emails, connection status, configurations, authentication, and other updates (Ex. 13 at 694), which constitute "information associated with a service usage" (claim 3) and "agent instruction, a setting value, an agent configuration, or a software update" (claim 9). G1 users could also received emails from carriers and utility companies that contain invoices, billing statements, or promotional messages, which constitute a "service offer, an advertisement, or a transaction offer" (claim 7) and "information from a third party configured to provide control of a service or a billing for a service" (claim 8).

Mr. de la Iglesia opines that Dr. Foster provided no evidence regarding the operation of synchronization or how the Google apps interoperate with GTalkService. Ex. 15, ¶¶ 430, 438. But the claims simply require that the message content comprise certain types of information. Mr. de la Iglesia does not dispute that the G1 had Google apps including Gmail, and the uncontroverted evidence shows that the G1 used GTalkService to synchronize the Google apps. *E.g.*, Ex. 10 at 768; Ex. 9 at 431; Ex. 12 at 86:23-87:24.

For claims 3, 9, and 9, Mr. de la Iglesa accuses apps downloaded from the Galaxy Store (and app store) of satisfying these claims. Ex. 1 at ¶¶ 870, 888, 892. GTalkService also allowed apps to be downloaded from the Android Market (and app store) so it anticipates for this additional reason. Ex. 4 at 888 ("the T-Mobile G1 is also the first phone to provide access to Android Market, where customers can find and download unique applications); Ex. 13 at 694 ("GTalkService was even used to install apps on Android.")

To the extent that GTalkService does not anticipate, it would have been obvious for the G1

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to download app from an app store and receive notifications about new emails on Gmail, software updates, and advertisements. Doing so would have involved nothing but using existing features on the Android platform, and no additional modification would have been needed to receive these apps or notifications about emails with this content.

Claim 13: GTalkService anticipates claims 13, which requires that the end-user device "send a device message" to the server. For infringement, Mr. de la Iglesia reads claim 13 on FCM's ███████████████████████ Ex. 1, ¶¶ 900-901. GTalkService had the same functionality. *See* Ex. 1, ¶ 901. To keep the TCP connection alive, the T-Mobile G1 ███ ████████████████████████████████████. Ex. 12 at 195:15-25. ███████████ satisfy the "device message." Mr. de la Iglesia does not dispute that GTalkService discloses the additional limitation of claim 13 and simply refers back to his rebuttal for claim 1. Ex. 15, ¶ 452.

Claim 19: GTalkService anticipates claim 19, which recites that the user device comprises "a user interface, and wherein the particular device agent is configured to assist in presenting a notification through the user interface, the notification based on the message content." For infringement, Mr. de la Iglesia opines that the Galaxy Store client ███████████████ ███ ████ ████████████ █ ████ █ █ █████████ Ex. 1, ¶¶ 910-911. GTalkService also used NotificationManager, which was introduced with Android from the start to enable "all applications to display custom alerts in the status bar." Ex. 3 at 381; *id.* at 427-430. The Gmail app on the G1, for example, displayed notifications previewing the content of an incoming email. Ex. 13 at 694 ("GTalkService ran communication for Android's entire push notification system, meaning that even things like a new Gmail notification came blasting down an always-on chat session between you and Google."). ApiDemos had the ability to display "popup notifications" and send "persistent and transient notifications." Ex. 29 at 235-236.

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Mr. de la Iglesia's states there is no evidence that Gmail provided notifications and GTalkService was allegedly removed from Android 1.0. Ex. 15, ¶ 456. But ApiDemos used notifications before Android 1.0 and Gmail never lost access to GTalkService. He cannot credibly dispute the evidence that the Gmail app used GTalkService for notifications. Ex. 13 at 694.

To the extent that GTalkService does not anticipate these claims, it would have been obvious for the G1 to generate a pop up on the user interface when new email is received in Gmail. It would not have entailed any modification of Android because, as discussed above, the Android notification manager was already available. It would have been well within the expertise of a POSITA to configure Gmail such that it generates a notification pop up on the user interface.

Claim 23: GTalkService anticipates claim 23, which recites that "the service control device link agent is further configured to send a device credential to the network system or receive the device credential from the network system during a service authorization sequence." In his infringement report, Mr. de la Iglesia points to the FCM's transmission of ▉▉▉▉▉▉▉▉ ▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉ Ex. 1, ¶¶ 910-911. The Gmail app on the G1 sent email account login information to the server to access emails, and this happened over GTalkService—"the cloud synchronization of Google account data" that was also an "authenticated way to quickly pass messages back and forth." Ex. 13 at 694.

To the extent that GTalkService does not anticipate this claim, it would have been obvious for the G1 to require that a user log into Gmail before accessing or syncing emails on the Gmail app. Logging into Gmail would have caused a transmission of the user's login credential information and device ID information to the Gmail server. Inasmuch as syncing was done via GTalkService (*see* Ex. 10 at 767), a POSITA would have understood that the login credential is also transmitted via GTalkService, utilizing the persistent connection provided by GTalkService.

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VI.   INDEPENDENT CLAIMS 1 AND 30: C2DM ANTICIPATES UNDER § 102(G)(2).

To the extent that Headwater argues that GTalkService does not qualify as prior art or was

not reduced to practice before the priority date, CD2M invalidates claims 1 and 30 under

§102(g)(2). Headwater accuses C2DM of infringement, but C2DM was the rebranded 2010

version of GTalkService. "When the defendant contends the patent is invalidated by the accused

product itself, the patentee's infringement allegations operate as a concession that the accused

product meets the limitations of the asserted claims." *Metaswitch Networks Ltd. v. Genband US*

LLC, 2016 WL 3618831, *7 (E.D. Tex. Mar. 1, 2016) (citing *Vanmoor v. Wal-Mart Stores, Inc.*,

201 F.3d 1363, 1366 (Fed. Cir. 2000)). There is no dispute that C2DM was reduced to practice at

least by 2010.

The GTalkService source code and corroborating documents shows that Google conceived

of every limitation before the priority date. There is no evidence that Google exercised anything

less than reasonable diligence in reducing C2DM to practice, abandoned, suppressed, or concealed

it. To the contrary, Google used GTalkService consistently and publicly (in phones like the T-

Mobile G1), and improved it before rolling it back out to non-Google apps rebranded as C2DM.

Ex. 9 at 431; Ex. 10 at 768; Ex. 12 at 26:4-18, 27:11-15, 87:10-24. Even when access was

temporarily removed for non-Google apps, the public continued using Google's apps.

VII.   SAMSUNG'S ACCUSED PRODUCTS DO NOT INFRINGE THE ASSERTED CLAIMS OF THE '733 PATENT UNDER AN INFRINGEMENT THEORY THAT RELIES ON THE REGISTRATION TOKEN AS THE CLAIMED "AGENT IDENTIFIER."

Headwater's alternative theory that C2DM, GCM, and FCM infringe the '733 patent

because they use a registration token as an "agent identifier" fails as a matter of law. Every asserted

claim requires that the "agent identifier" be included in the "agent message" sent from the server

to the end-user device.   There is no evidence—other than Mr. de la Iglesia' conclusory

allegations—that the registration token is included in the message, and the only evidence Mr. de

la Iglesia cites has nothing to do with a registration token.

According to Mr. de la Iglesia, the accused products use a "unique registration token

identifying the device and particular application." Ex. 1, ¶ 154. Mr. de la Iglesia opines that a

registration token is the "agent identifier." *E.g.*, *id.*, ¶¶ 680, 767, 829, 859. Specifically, Mr. de

la Iglesia opines that "[t]he push messages delivered to end-user devices are referred to as the

████████████████" and the ████████████████contains a "registration token." *Id.*, ¶¶ 680,

549. The registration token, according to Mr. de la Iglesia, is how the agent message is delivered

to the correct application. *Id.*, ¶ 811.

But there is actually no evidence that a registration token is included ██ ██

████████████████ *i.e.*, the alleged "agent message"). Ex. 30 at 1776. Mr. de la Iglesia relies

on ██ Ex. 1, ¶ 549. ██

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Ex. 32 at line 287. A collapse key does not identify a device nor a particular application and Mr.

de la Iglesia does not contend it does. A collapse key indicates whether a message is "collapsible,"

i.e., only the most recent message is needed to tell a mobile app to sync data from the server. Ex.

31 at 847-848; Ex. 12 at 202:22-203:6. For example, multiple messages showing sports scores

can be collapsed because the user only needs to see the message with the latest score, so the prior

score message can be discarded. Thus, the collapse key says nothing about a registration token

nor the claimed "agent identifier."

Mr. de la Iglesia offers no other evidence that the alleged "agent message" includes a

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registration token.[1] Headwater thus cannot rely on the registration token as the "agent identifier."

VIII.   CONCLUSION

For the foregoing reasons, the Court should grant summary judgment of invalidity of the

'733 patent and partial summary judgment of non-infringement for the '733 patent.

Dated: October 25, 2024   Respectfully submitted,

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[1] Mr. de la Iglesia also cites ████████████████████
██. Ex. 30 at 785.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing was served

on counsel of record for Plaintiff via electronic mail on October 25, 2024.

/s/ Kevin Jang
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